IN THE SPECIFICATION:

Please **REPLACE** the fourth full paragraph on page 1 at lines 21-33, as follows:

--Various types of high-resolution optical projection systems have been considered for high-resolution microlithography systems. Purely refractive projection systems are inadequate at [al] ultraviolet wavelengths. For wavelengths below 300 nm, only a few optical materials are transmissive and refractive optical elements generally must be made of either synthetic fused quartz or fluorite. Unfortunately, combining optical elements of synthetic fused quartz and fluorite is ineffective in eliminating chromatic aberration because the Abbe numbers of synthetic quartz and fluorite are not sufficiently different. Therefore, refractive optical systems for wavelengths less than about 300nm suffer from unacceptable levels of chromatic aberration.--

Please **REPLACE** the third full paragraph on page 2 at lines 16-25, as follows:

–Optical systems comprising more than one mirror can use fewer lenses than a purely refractive optical system, but other problems arise. In order to increase resolution and depth of focus, phase-shift masks are frequently used. In order to effectively use a phase-shift mask, the ratio [a]$\underline{\sigma}$ of the numerical aperture of the irradiation optical system and the numerical aperture of the projection system should be variable. While an adjustable aperture is easily located in the irradiation optical system, a catadioptric projection system usually has no suitable location for a corresponding aperture, adjustable or not.--

Please **REPLACE** the second and third full paragraphs on page 8 at lines 29-40, with the following single paragraph as follows:

--In the first example embodiment, the optical projection system does not project the entire reticle R onto the wafer W in a single exposure. Rather, as shown in FIG. 2(a), an illuminated region 221 of the reticle R is projected onto a corresponding exposure region 231 on the wafer W (FIG. 2(c)). In the first embodiment, the illuminated region 221 is rectangular, 120 mm long and 24 mm wide. The length of the illuminated region 221 is symmetrically placed with respect to a line 222 perpendicular to the optical axis 210. The width of the illuminated region 221 is such that the illuminated region 221 extends from 52 mm to 76 mm from a line 223 perpendicular to the optical axis 210.--

Please **REPLACE** the fifth full paragraph on page 8 at lines 47-58, as follows:

--In the first example embodiment, the turning mirror M_2 [so] receives light reflected by the concave mirror M_1 and directs the light to the second imaging system B. The invention also provides an alternative arrangement in which the turning mirror M_2 receives light from the single-pass lens group and directs the light to the double-pass lens group and the concave mirror M_1. Light reflected by the concave mirror M_2 then propagates directly to the second imaging system without reflection by the turning mirror M_1. In the first example embodiment and in such a modification of the first example embodiment, the turning mirror M_1 thus separates light propagating from the double-pass optical group A_2 and light propagating to the double-pass optical group A_2.--

Please **REPLACE** the last paragraph on page 8 starting at line 59 and ending on page 9 at line 8, as follows:

--A second example embodiment of the invention is shown in FIG. 5. The optical projection system of FIG. 5 is similar to that of the embodiment of FIG. 2. Light from an illuminated region 321 (FIG. 3(a)) of a reticle R is directed to, beginning nearest the reticle R and along an optical axis 310, a single-pass lens group A_1 comprising a first negative subgroup A_{11}, a positive subgroup A_{12} and a second negative subgroup A_{13}. After the second negative subgroup A_{13}, a turning mirror [MO] $\underline{M_0}$ reflects the light along an optical axis 311 of a double-pass lens group A_2 including a concave mirror [Ml] $\underline{M_1}$. Light is transmitted by the double-pass lens group A_2 and is reflected by the concave mirror M_1 back through the double-pass lens group A_2 to a turning mirror M_2. An intermediate image of the illuminated region 321 is formed near the turning mirror M_2.--

Please **REPLACE** the first full paragraph on page 9 at lines 8 starting at line 59 and ending on page 9 at line 8, as follows:

-- The turning mirror M_2 directs the light from the [illumi-nated] <u>illuminated</u> region of the reticle R along the optical axis 310 which is an optical axis of the second imaging system B as well as of the single-pass lens group A_1. The second imaging system B receives light from the turning mirror M_2 and re-images the intermediate image onto a corresponding region 331 on the wafer W. As will be apparent, the second embodiment differs from the first embodiment in that the turning mirror M_0 is placed between the single-pass lens group A_1 and the double-pass lens group A_2. The turning

mirror M_0 permits the reticle R and the wafer W to be in parallel planes. As shown in FIG. 5, the reticle R and the wafer W are along the same optical axis 312.--